

WO 03/089932

SEQUENCE LISTING

<110> Queensland University of Technology (all states other than U.S.)
Clements, Judith A (U.S. only)

<120> Condition-specific molecules and uses therefor

<130> 12176212/VPA

<140> Unassigned

<141> 2003-04-22

<150> AU PS1870/02

<151> 2002-04-22

<160> 43

<170> PatentIn version 3.2

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<222> (38)..(577)

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Phe Leu Thr Leu Ser Val Thr Trp Ile Gly Ala Ala Pro Leu Ile Leu
10 15 20

tct cgg att gtg gga ggc tgg gag tgc gag aag cat tcc caa ccc tgg 151
Ser Arg Ile Val Gly Gly Trp Glu Cys Glu Lys His Ser Gln Pro Trp
25 30 35

cag gtg ctt gtg gcc tct cgt ggc agg gca gtc tgc ggc ggt gtt ctg 199
Gln Val Leu Val Ala Ser Arg Gly Arg Ala Val Cys Gly Gly Val Leu
40 45 50

gtg cac ccc cag tgg gtc ctc aca gct gcc cac tgc atc agg aac aaa 247
Val His Pro Gln Trp Val Leu Thr Ala Ala His Cys Ile Arg Asn Lys
55 60 65 70

agc gtg atc ttg ctg ggt cgg cac agc ctg ttt cat cct gaa gac aca 295
Ser Val Ile Leu Leu Gly Arg His Ser Leu Phe His Pro Glu Asp Thr
75 80 85

ggc cag gta ttt cag gtc agc cac agc ttc cca cac ccg ctc tac gat 343
Gly Gln Val Phe Gln Val Ser His Ser Phe Pro His Pro Leu Tyr Asp
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Met Ser Leu Leu Lys Asn Arg Phe Leu Arg Pro Gly Asp Asp Ser Ser

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gct gtg aag gtc atg gac	ctg ccc acc cag gag cca	gca ctg ggg acc	487
Ala Val Lys Val Met Asp	Leu Pro Thr Gln Glu Pro	Ala Leu Gly Thr	
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acc tgc tac gcc tca ggc	tgg ggc agc att gaa cca	gag gag tgt acg	535
Thr Cys Tyr Ala Ser Gly	Trp Gly Ser Ile Glu Pro	Glu Glu Cys Thr	
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Pro Gly Pro Asp Gly Ala	Ala Gly Ser Pro Asp Ala	Trp Val	
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Ala Ala Pro Leu Ile Leu Ser Arg Ile Val Gly Gly Trp Glu Cys Glu
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Lys His Ser Gln Pro Trp Gln Val Leu Val Ala Ser Arg Gly Arg Ala
35 40 45

Val Cys Gly Gly Val Leu Val His Pro Gln Trp Val Leu Thr Ala Ala
50 55 60

His Cys Ile Arg Asn Lys Ser Val Ile Leu Leu Gly Arg His Ser Leu
65 70 75 80

Phe His Pro Glu Asp Thr Gly Gln Val Phe Gln Val Ser His Ser Phe
85 90 95

Pro His Pro Leu Tyr Asp Met Ser Leu Leu Lys Asn Arg Phe Leu Arg
100 105 110

Pro Gly Asp Asp Ser Ser His Asp Leu Met Leu Leu Arg Leu Ser Glu
115 120 125

Pro Ala Glu Leu Thr Asp Ala Val Lys Val Met Asp Leu Pro Thr Gln
130 135 140

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His	Ser	Gln	Pro	Trp	Gln	Val	Leu	Val	Ala	Ser	Arg	Gly	Arg	Ala	Val		
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tgc	ggc	ggt	gtt	ctg	gtg	cac	ccc	cag	tgg	gtc	ctc	aca	gct	gcc	cac		144
Cys	Gly	Gly	Val	Leu	Val	His	Pro	Gln	Trp	Val	Leu	Thr	Ala	Ala	His		
			35				40					45					
tgc	atc	agg	aac	aaa	agc	gtg	atc	ttg	ctg	ggt	cgg	cac	agc	ctg	ttt		192
Cys	Ile	Arg	Asn	Lys	Ser	Val	Ile	Leu	Leu	Gly	Arg	His	Ser	Leu	Phe		
	50					55					60						
cat	cct	gaa	gac	aca	ggc	cag	gta	ttt	cag	gtc	agc	cac	agc	ttc	cca		240
His	Pro	Glu	Asp	Thr	Gly	Gln	Val	Phe	Gln	Val	Ser	His	Ser	Phe	Pro		
65						70				75					80		
cac	ccg	ctc	tac	gat	atg	agc	ctc	ctg	aag	aat	cga	ttc	ctc	agg	cca		288
His	Pro	Leu	Tyr	Asp	Met	Ser	Leu	Leu	Lys	Asn	Arg	Phe	Leu	Arg	Pro		
				85					90					95			
ggt	gat	gac	tcc	agc	cac	gac	ctc	atg	ctg	ctc	cgc	ctg	tca	gag	cct		336
Gly	Asp	Asp	Ser	Ser	His	Asp	Leu	Met	Leu	Leu	Arg	Leu	Ser	Glu	Pro		
			100					105					110				
gcc	gag	ctc	acg	gat	gct	gtg	aag	gtc	atg	gac	ctg	ccc	acc	cag	gag		384
Ala	Glu	Leu	Thr	Asp	Ala	Val	Lys	Val	Met	Asp	Leu	Pro	Thr	Gln	Glu		
			115				120					125					
cca	gca	ctg	ggg	acc	acc	tgc	tac	gcc	tca	ggc	tgg	ggc	agc	att	gaa		432
Pro	Ala	Leu	Gly	Thr	Thr	Cys	Tyr	Ala	Ser	Gly	Trp	Gly	Ser	Ile	Glu		
			130			135					140						
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Pro	Glu	Glu	Cys	Thr	Pro	Gly	Pro	Asp	Gly	Ala	Ala	Gly	Ser	Pro	Asp		
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Ala	Trp	Val															

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			20					25					30				
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			35				40					45					

Cys Ile Arg Asn Lys Ser Val Ile Leu Leu Gly Arg His Ser Leu Phe
50 55 60

His Pro Glu Asp Thr Gly Gln Val Phe Gln Val Ser His Ser Phe Pro
65 70 75 80

His Pro Leu Tyr Asp Met Ser Leu Leu Lys Asn Arg Phe Leu Arg Pro
85 90 95

Gly Asp Asp Ser Ser His Asp Leu Met Leu Leu Arg Leu Ser Glu Pro
100 105 110

Ala Glu Leu Thr Asp Ala Val Lys Val Met Asp Leu Pro Thr Gln Glu
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Leu Val Ala Ser Arg Gly Arg Ala Val Cys Gly Gly Val Leu Val His
20 25 30
ccc cag tgg gtc ctc aca gct gcc cac tgc atc agg aac aaa agc gtg 144
Pro Gln Trp Val Leu Thr Ala Ala His Cys Ile Arg Asn Lys Ser Val
35 40 45
atc ttg ctg ggt cgg cac agc ctg ttt cat cct gaa gac aca ggc cag 192
Ile Leu Leu Gly Arg His Ser Leu Phe His Pro Glu Asp Thr Gly Gln
50 55 60

gta ttt cag gtc agc cac agc ttc cca cac ccg ctc tac gat atg agc 240
 Val Phe Gln Val Ser His Ser Phe Pro His Pro Leu Tyr Asp Met Ser
 65 70 75 80

ctc ctg aag aat cga ttc ctc agg cca ggt gat gac tcc agc cac gac 288
 Leu Leu Lys Asn Arg Phe Leu Arg Pro Gly Asp Asp Ser Ser His Asp
 85 90 95

ctc atg ctg ctc cgc ctg tca gag cct gcc gag ctc acg gat gct gtg 336
 Leu Met Leu Leu Arg Leu Ser Glu Pro Ala Glu Leu Thr Asp Ala Val
 100 105 110

aag gtc atg gac ctg ccc acc cag gag cca gca ctg ggg acc acc tgc 384
 Lys Val Met Asp Leu Pro Thr Gln Glu Pro Ala Leu Gly Thr Thr Cys
 115 120 125

tac gcc tca ggc tgg ggc agc att gaa cca gag gag tgt acg cct ggg 432
 Tyr Ala Ser Gly Trp Gly Ser Ile Glu Pro Glu Glu Cys Thr Pro Gly
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cca gat ggt gca gcc ggg agc cca gat gcc tgg gtc tga 471
 Pro Asp Gly Ala Ala Gly Ser Pro Asp Ala Trp Val
 145 150 155

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Pro Gln Trp Val Leu Thr Ala Ala His Cys Ile Arg Asn Lys Ser Val
 35 40 45

Ile Leu Leu Gly Arg His Ser Leu Phe His Pro Glu Asp Thr Gly Gln
 50 55 60

Val Phe Gln Val Ser His Ser Phe Pro His Pro Leu Tyr Asp Met Ser
 65 70 75 80

Leu Leu Lys Asn Arg Phe Leu Arg Pro Gly Asp Asp Ser Ser His Asp
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Leu Met Leu Leu Arg Leu Ser Glu Pro Ala Glu Leu Thr Asp Ala Val
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Gly Cys Thr Gly Ala Val Pro Leu Ile Gln Ser Arg Ile Val Gly Gly
             15             20             25

tgg gag tgt gag aag cat tcc caa ccc tgg cag gtg gct gtg tac agt      148
Trp Glu Cys Glu Lys His Ser Gln Pro Trp Gln Val Ala Val Tyr Ser
             30             35             40

cat gga tgg gca cac tgt ggg ggt gtc ctg gtg cac ccc cag tgg gtg      196
His Gly Trp Ala His Cys Gly Gly Val Leu Val His Pro Gln Trp Val
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ctc aca gct gcc cat tgc cta aag aag aat agc cag gtc tgg ctg ggt      244
Leu Thr Ala Ala His Cys Leu Lys Lys Asn Ser Gln Val Trp Leu Gly
             65             70             75

cgg cac aac ctg ttt gag cct gaa gac aca ggc cag agg gtc cct gtc      292
Arg His Asn Leu Phe Glu Pro Glu Asp Thr Gly Gln Arg Val Pro Val
             80             85             90

agc cac agc ttc cca cac ccg ctc tac aat atg agc ctt ctg aag cat      340
Ser His Ser Phe Pro His Pro Leu Tyr Asn Met Ser Leu Leu Lys His
             95             100             105

caa agc ctt aga cca gat gaa gac tcc agc cat gac ctc atg ctg ctc      388
Gln Ser Leu Arg Pro Asp Glu Asp Ser Ser His Asp Leu Met Leu Leu
             110             115             120

cgc ctg tca gag cct gcc aag atc aca gat gtt gtg aag gtc ctg ggc      436
Arg Leu Ser Glu Pro Ala Lys Ile Thr Asp Val Val Lys Val Leu Gly
             125             130             135             140

ctg ccc acc cag gag cca gca ctg ggg acc acc tgc tac gcc tca ggc      484
Leu Pro Thr Gln Glu Pro Ala Leu Gly Thr Thr Cys Tyr Ala Ser Gly
             145             150             155

tgg ggc agc atc gaa cca gag gag ttc ttg cgc ccc agg agt ctt cag      532
Trp Gly Ser Ile Glu Pro Glu Glu Phe Leu Arg Pro Arg Ser Leu Gln
             160             165             170

tgt gtg agc ctc cat ctc ctg tcc aat gac atg tgt gct aga gct tac      580
Cys Val Ser Leu His Leu Leu Ser Asn Asp Met Cys Ala Arg Ala Tyr
             175             180             185

tct gag aag gtg aca gag ttc atg ttg tgt gct ggg ctc tgg aca ggt      628
Ser Glu Lys Val Thr Glu Phe Met Leu Cys Ala Gly Leu Trp Thr Gly
             190             195             200

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 205 210 215 220

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 Gly Lys Gly

ggtatcacat catggggccc tgagccatgt gccctgcctg aaaagcctgc tgtgtacacc 785

aaggtggtgc attaccgga gtggatcaag gacaccatcg cagccaaccc ctgagtggcc 845

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Lys His Ser Gln Pro Trp Gln Val Ala Val Tyr Ser His Gly Trp Ala
 35 40 45

His Cys Gly Gly Val Leu Val His Pro Gln Trp Val Leu Thr Ala Ala
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His Cys Leu Lys Lys Asn Ser Gln Val Trp Leu Gly Arg His Asn Leu

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 50 55 60
 gag cct gaa gac aca ggc cag agg gtc cct gtc agc cac agc ttc cca 240
 Glu Pro Glu Asp Thr Gly Gln Arg Val Pro Val Ser His Ser Phe Pro
 65 70 75 80
 cac ccg ctc tac aat atg agc ctt ctg aag cat caa agc ctt aga cca 288
 His Pro Leu Tyr Asn Met Ser Leu Leu Lys His Gln Ser Leu Arg Pro
 85 90 95
 gat gaa gac tcc agc cat gac ctc atg ctg ctc cgc ctg tca gag cct 336
 Asp Glu Asp Ser Ser His Asp Leu Met Leu Leu Arg Leu Ser Glu Pro
 100 105 110
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 Ala Lys Ile Thr Asp Val Val Lys Val Leu Gly Leu Pro Thr Gln Glu
 115 120 125
 cca gca ctg ggg acc acc tgc tac gcc tca ggc tgg ggc agc atc gaa 432
 Pro Ala Leu Gly Thr Thr Cys Tyr Ala Ser Gly Trp Gly Ser Ile Glu
 130 135 140
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 Pro Glu Glu Phe Leu Arg Pro Arg Ser Leu Gln Cys Val Ser Leu His
 145 150 155 160
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 Leu Leu Ser Asn Asp Met Cys Ala Arg Ala Tyr Ser Glu Lys Val Thr
 165 170 175
 gag ttc atg ttg tgt gct ggg ctc tgg aca ggt ggt aaa gac act tgt 576
 Glu Phe Met Leu Cys Ala Gly Leu Trp Thr Gly Gly Lys Asp Thr Cys
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 35 40 45

Cys Leu Lys Lys Asn Ser Gln Val Trp Leu Gly Arg His Asn Leu Phe
 50 55 60

Glu Pro Glu Asp Thr Gly Gln Arg Val Pro Val Ser His Ser Phe Pro
 65 70 75 80

His Pro Leu Tyr Asn Met Ser Leu Leu Lys His Gln Ser Leu Arg Pro
 85 90 95

Asp Glu Asp Ser Ser His Asp Leu Met Leu Leu Arg Leu Ser Glu Pro
 100 105 110

Ala Lys Ile Thr Asp Val Val Lys Val Leu Gly Leu Pro Thr Gln Glu
 115 120 125

Pro Ala Leu Gly Thr Thr Cys Tyr Ala Ser Gly Trp Gly Ser Ile Glu
 130 135 140

Pro Glu Glu Phe Leu Arg Pro Arg Ser Leu Gln Cys Val Ser Leu His
 145 150 155 160

Leu Leu Ser Asn Asp Met Cys Ala Arg Ala Tyr Ser Glu Lys Val Thr
 165 170 175

Glu Phe Met Leu Cys Ala Gly Leu Trp Thr Gly Gly Lys Asp Thr Cys
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 Ala Val Tyr Ser His Gly Trp Ala His Cys Gly Gly Val Leu Val His
 20 25 30
 ccc cag tgg gtg ctc aca gct gcc cat tgc cta aag aag aat agc cag 144
 Pro Gln Trp Val Leu Thr Ala Ala His Cys Leu Lys Lys Asn Ser Gln

35										40					45					
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agg	gtc	cct	gtc	agc	cac	agc	ttc	cca	cac	ccg	ctc	tac	aat	atg	agc	240				
Arg	Val	Pro	Val	Ser	His	Ser	Phe	Pro	His	Pro	Leu	Tyr	Asn	Met	Ser					
65		70			75			80												
ctt	ctg	aag	cat	caa	agc	ctt	aga	cca	gat	gaa	gac	tcc	agc	cat	gac	288				
Leu	Leu	Lys	His	Gln	Ser	Leu	Arg	Pro	Asp	Glu	Asp	Ser	Ser	His	Asp					
85				90				95												
ctc	atg	ctg	ctc	cgc	ctg	tca	gag	cct	gcc	aag	atc	aca	gat	gtt	gtg	336				
Leu	Met	Leu	Leu	Arg	Leu	Ser	Glu	Pro	Ala	Lys	Ile	Thr	Asp	Val	Val					
100			105			110														
aag	gtc	ctg	ggc	ctg	ccc	acc	cag	gag	cca	gca	ctg	ggg	acc	acc	tgc	384				
Lys	Val	Leu	Gly	Leu	Pro	Thr	Gln	Glu	Pro	Ala	Leu	Gly	Thr	Thr	Cys					
115			120			125														
tac	gcc	tca	ggc	tgg	ggc	agc	atc	gaa	cca	gag	gag	ttc	ttg	cgc	ccc	432				
Tyr	Ala	Ser	Gly	Trp	Gly	Ser	Ile	Glu	Pro	Glu	Glu	Phe	Leu	Arg	Pro					
130			135			140														
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Arg	Ser	Leu	Gln	Cys	Val	Ser	Leu	His	Leu	Leu	Ser	Asn	Asp	Met	Cys					
145		150			155			160												
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Ala	Arg	Ala	Tyr	Ser	Glu	Lys	Val	Thr	Glu	Phe	Met	Leu	Cys	Ala	Gly					
165				170			175													
ctc	tgg	aca	ggt	ggt	aaa	gac	act	tgt	ggg	gtg	agt	cat	ccc	tac	tcc	576				
Leu	Trp	Thr	Gly	Gly	Lys	Asp	Thr	Cys	Gly	Val	Ser	His	Pro	Tyr	Ser					
180			185			190														
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Ala	Val	Tyr	Ser	His	Gly	Trp	Ala	His	Cys	Gly	Gly	Val	Leu	Val	His
			20				25						30		

Pro	Gln	Trp	Val	Leu	Thr	Ala	Ala	His	Cys	Leu	Lys	Lys	Asn	Ser	Gln
	35					40					45				

Val Trp Leu Gly Arg His Asn Leu Phe Glu Pro Glu Asp Thr Gly Gln
50 55 60

Arg Val Pro Val Ser His Ser Phe Pro His Pro Leu Tyr Asn Met Ser
65 70 75 80

Leu Leu Lys His Gln Ser Leu Arg Pro Asp Glu Asp Ser Ser His Asp
85 90 95

Leu Met Leu Leu Arg Leu Ser Glu Pro Ala Lys Ile Thr Asp Val Val
100 105 110

Lys Val Leu Gly Leu Pro Thr Gln Glu Pro Ala Leu Gly Thr Thr Cys
115 120 125

Tyr Ala Ser Gly Trp Gly Ser Ile Glu Pro Glu Glu Phe Leu Arg Pro
130 135 140

Arg Ser Leu Gln Cys Val Ser Leu His Leu Leu Ser Asn Asp Met Cys
145 150 155 160

Ala Arg Ala Tyr Ser Glu Lys Val Thr Glu Phe Met Leu Cys Ala Gly
165 170 175

Leu Trp Thr Gly Gly Lys Asp Thr Cys Gly Val Ser His Pro Tyr Ser
180 185 190

Gln His Leu Glu Gly Lys Gly
195

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Val Ser His Pro Tyr Ser Gln His Leu Glu Gly Lys Gly
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27

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22

<210> 18

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21

<210> 20

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21

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21

<210> 22
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<210> 23
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<210> 37

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<400> 39
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<400> 42

tgaattgcta tgtgtctggg t

21

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<400> 43

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21